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DEPARTMENT OF NATURAL RESOURCES
AND CONSERVATION



BRIAN SCHWEITZER
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Distribution list / EA cover letter:

April 9, 2007

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Montana Environmental Information Center, POB 1184, Helena, MT 59624
Montana Audubon Council, P.O. Box 924, Helena, MT 59624
Lewis & Clark County Commissioners, 316 N. Park Ave. Helena, MT 59601
Wildlife Federation, P.O. Box 1175, Helena, MT 59624
Trout Unlimited, P.O. Box 7186, Missoula, MT 59807
U.S. Army Corps of Engineers, 10 West 15th St., Suite 2200, Helena, MT 59626
U.S. Fish and Wildlife Service, MT Field Office, 100 N. Park, Suite 320, Helena, MT 59601

Ladies and Gentlemen:

The enclosed draft Environmental Assessment (EA) has been prepared for the Nilan North Dam Outlet Repair Project and is submitted for your consideration. Please feel free to contact me at (406) 444-6605 should you have any questions or comments. Comments can be mailed or e-mailed to the MT DNRC, State Water Projects Bureau, 1424 9th Ave, P.O. Box 201601, Helena, MT 59620-1601, attention James P. Domino, e-mail jdomino@mt.gov. Comments will be accepted until 5:00 p.m., Tuesday, May 8th 2007. The draft EA can be viewed online at: http://www.dnrc.mt.gov/env_docs/default.asp. Copies of the draft EA are also available upon request. Thank you for your interest.

Sincerely,

John Tubbs
Division Administrator
Water Resources Division

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Draft Environmental Assessment



Nilan North Dam Outlet Repair Project

April 2007



On the
Continuity of the
Spectrum



Approximate
Continuity of the
Spectrum



Table of Contents

Page 1	Part I. Proposed Action Description
	Type of Proposed State Action
	Agency Authority
	Project Name
	Project Sponsor
	Construction Timeline
	Project Location
Page 2	Project Size
	Agencies with overlapping jurisdiction
	Permits Needed
	Funding
	Narrative Summary
Page 4	Project Map
Page 5	Project Photographs
Page 7	Part II. Environmental Review
	Alternatives and Proposed Action
	Evaluation and Listing of Mitigation
	Part III. Public Participation
Page 8	Part IV. EA Preparation
Page 9	Part V. Environmental Review Checklist
	A. Physical Environment – Land Resources
Page 10	Air
Page 11	Water
Page 12	Vegetation
Page 13	Fish / Wildlife
Page 14	B. Human Environment – Noise / Electrical Effects
Page 15	Land Use
Page 16	Risk / Health Hazards
Page 17	Community Impact
Page 18	Public Services / Taxes / Utilities
Page 19	Aesthetics / Recreation
Page 20	Cultural / Historical Resources
Page 21	C. Significance Criteria
Page 22	Part VI. Narrative Evaluation and Comment
Page 23	Appendix A



Nilan North Dam Outlet Repair Project Draft Environmental Assessment and MEPA Checklist

PART I. PROPOSED ACTION DESCRIPTION

1. **Type of proposed state action:** The State Water Projects Bureau of the Water Resources Division, Department of Natural Resources and Conservation (DNRC), proposes to repair the terminal outlet structure on the Nilan North Dam. The repair work includes replacing the outlet structure and installing filters and drains at the outlet terminal structure to control and collect seepage.
2. **Agency authority for the proposed action:** The Montana Legislature enacted statute 85-1-101 MCA, which authorizes the DNRC to construct, operate and maintain a system of works for the conservation, development, storage, distribution, and utilization of water, which construction, operation and maintenance is a single objective and is in all respects for the welfare and benefit of the people of the state.
3. **Name of project:** Nilan North Dam Outlet Repair Project
4. **Name, address and phone number of project sponsor (if other than the agency):** The DNRC is the project sponsor.
5. **Construction Timeline:**
Estimated Construction/Commencement Date: October 2007
Estimated Completion Date: December 2007
Current Status of Project Design (% complete): 80%
6. **Location affected by proposed action (county, range and township):**
The Nilan North Dam is located in Lewis and Clark County, Township 20N, Range 7W, Sections 17 and 18. See Figure 1 on page 4 for location maps.

7. **Project size -- estimate the number of acres that would be directly affected that are currently:**

	<u>Acres</u>		<u>Acres</u>
(a) Developed:		(d) Floodplain	<u>0</u>
Residential	<u>0</u>		
Industrial	<u>0</u>	(e) Productive:	
(b) Open Space/Woodlands/Recreation	<u>0</u>	Irrigated cropland	<u>0</u>
		Dry cropland	<u>0</u>
(c) Wetlands/Riparian Areas	<u>0</u>	Forestry	<u>0</u>
		Rangeland	<u>0</u>
		Other (earthen dam)	<u>1/2</u>

8. **Listing of any other Local, State or Federal agency that has overlapping or additional jurisdiction.**

- (a) **Permits: All permits will be obtained prior to applicable project construction.**

<u>Agency Name</u>	<u>Permit</u>
US Corps of Engineers	Section 404 (if required)
DNRC Montana Dam Safety	Construction Permit (if required)

- (b) **Funding:**

<u>Agency Name</u>	<u>Funding Amount</u>
DNRC	\$ 113,608

- (c) **Other Overlapping or Additional Jurisdictional Responsibilities:**

<u>Agency Name</u>	<u>Type of Responsibility</u>
State Historic Preservation Office	Cultural Resource Protection

9. **Narrative summary of the proposed action or project including the benefits and purpose of the proposed action:**

The Nilan North Dam is located 6 miles west of Augusta, Montana in Lewis & Clark County. The dam is owned by the Montana Department of Natural Resources and Conservation. The dam, one of two on the reservoir, is an earthfill structure constructed in 1951 and is classified as high hazard, which means there may be loss of life if the dam were to fail. The North Dam has a length of 530, a crest width of 20 feet and is 54 feet high. The reservoir can store approximately 10,000-acre feet of water at full pool. The Nilan Water Users' Association is responsible for the operation and maintenance of the dam. The reservoir is a popular recreation area, with fishing the primary attraction.

The repair work includes replacing the outlet structure and installing filters and drains at the outlet terminal structure to control and collect seepage. The outlet structure at the North Dam is structurally in very poor condition and has deteriorated to the point that additional small repairs and patching are not economical or feasible. The accelerating deterioration is primarily a function of continuous freeze-thaw damage, severe cracking, and age. There is also a considerable amount of seepage that exits in the location of the outlet. Uncontrolled seepage along the side of the conduit could cause material to be removed from the dam embankment and cause failure of the dam. The proposed drain installation would encircle the end of the conduit to safely discharge seepage water. With regards to environmental issues, the construction will involve minimal or no impacts to reservoir operations, water quality and quantity, recreational and fisheries resources, as all the work will be performed on the terminal structure (downstream side) of the outlet. Access and site preparation will simply involve closing the gate during construction. The area around the outlet and the North Dam Outlet Canal would be dry for the duration of the project. Appendix A contains preliminary design plans for the new terminal structure and drain system.

The rehabilitation will provide a safe outlet structure at the North Dam, and will control seepage at the dam. The repairs and improvements will enhance the longevity of the dam, promote effective water conservation, and greatly enhance public safety. A 404-permit application has been submitted to the U.S. Army Corps of Engineers. The Montana Department of Fish, Wildlife & Parks was consulted and indicated that a Montana Department of Environmental Quality Short-Term Exemption from Surface Water Quality Standards (318) Permit and a Montana Streamside Protection Act (124) Permit would not be required. The DNRC Dam Safety Section has been informed of the project in the event a Dam Safety Construction Permit is needed. The Montana State Historic Preservation Office and the Montana Natural Heritage Program have also been contacted concerning historic resources and the presence of any species of special concern in the vicinity of the construction site. It is not anticipated that any historic resources or animal or plant species of special concern would be significantly impacted by the project.



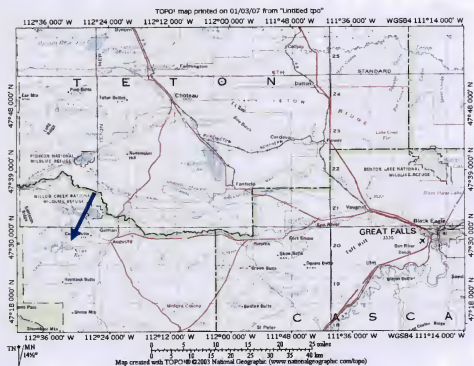


Figure 1. Area maps of Nilan Reservoir. The North Dam is referenced in the second, larger scale map.

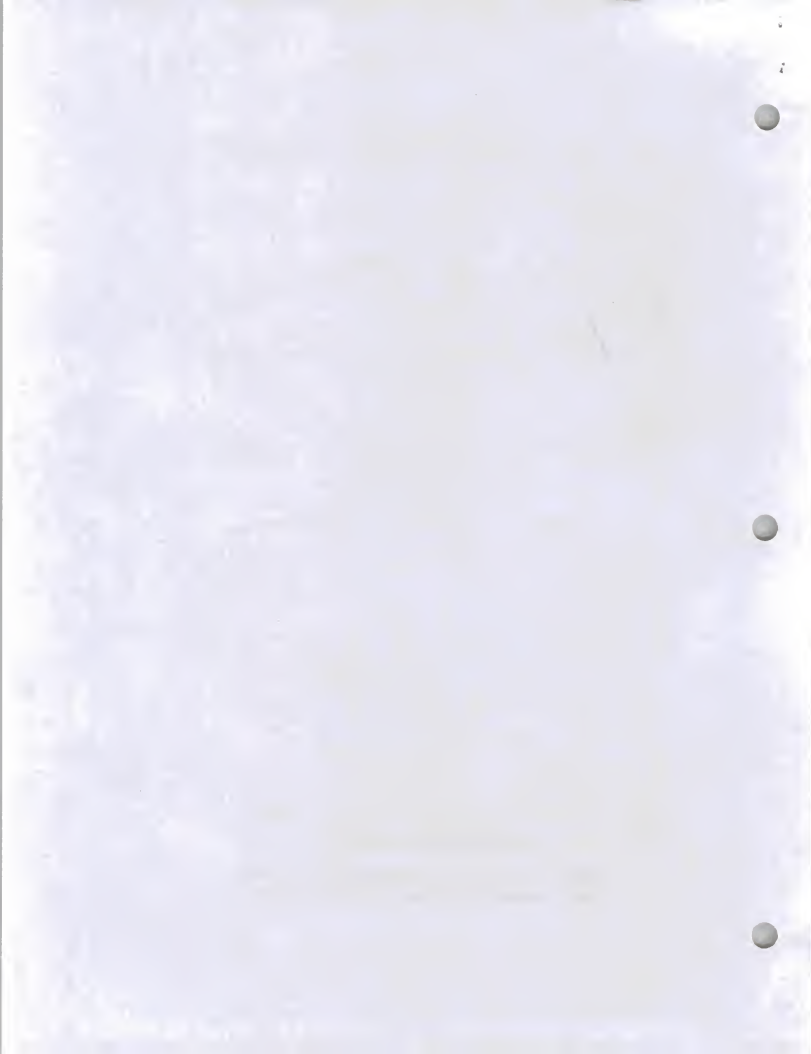




Figure 2. The Nilan North Dam



Figure 3. Terminal Outlet Structure at the N. Dam.



Figure 4. Seepage area (green vegetation) above the outlet terminal structure.





Figure 4. Close-up view of deteriorating concrete in the N. Dam Outlet.



Figure 6 – Outlet Canal (looking North from the crest of the N. Dam).
The canal will be dry during construction.



PART II. ENVIRONMENTAL REVIEW

- 1. Description and analysis of reasonable alternatives (including the no action alternative) to the proposed action whenever alternatives are reasonably available and prudent to consider and a discussion of how the alternatives would be implemented:**

Alternative A: No Action

If no action is taken, the outlet structure would continue to deteriorate. This could affect the integrity of the dam itself, including the possibility of failure, particularly should a major flood episode occur. This would greatly increase the risk to the public and property downstream from a designated high hazard dam. An important water resource for agriculture, recreation, and fisheries and wildlife habitat could be lost under this alternative should the dam fail.

Alternative B: Proposed Action

Note: a detailed evaluation of the Proposed Action is included in Part V. The Environmental Review Checklist begins on page 9.

In this preferred Alternative, the dam and reservoir would continue to serve as an important and popular water resource. This alternative will have the beneficial effects of replacing a critical, deteriorating component of the North Dam with a new structure that meets current design and safety standards. The structural integrity and safety of the dam would be enhanced, thereby reducing downstream public and property risks and the State liability associated with a high hazard dam.

- 2. Evaluation and listing of mitigation, stipulation, or other control measures enforceable by the agency or another government agency:**

There are no formal stipulations of mitigation or other controls associated with the proposed action. This action does not involve any permits or granting of a license on which stipulations would be placed.

PART III. PUBLIC PARTICIPATION

- 1. Describe the level of public involvement for this project if any, and, given the complexity and the seriousness of the environmental issues associated with the proposed action, is the level of public involvement appropriate under the circumstances?**

The public will be notified by way of a public notice on DNRC web page at www.dnrc.mt.gov. Individual notices will be sent to the State Water Projects Bureau standard EA distribution list and to those that have requested a copy.

Duration of comment period:

A 30-day comment period is proposed (April 9 to May 8 2007). This level of public involvement is appropriate for this scale of project.

PART IV. EA PREPARATION

- 1. Based on the significance criteria evaluated in this EA, is an EIS required? If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action.**

Based on an evaluation of the primary, secondary, and cumulative impacts to the physical and human environment under the Montana Environmental Protection Act (MEPA), this environmental review found no significant impacts from the proposed project. In determining the significance of the impacts, the DNRC assessed the severity, duration, geographic extent, and frequency of the impact, the probability that the impact would occur or reasonable assurance that the impact would not occur, growth-inducing or growth inhibiting aspects of the impact, the importance to the state and to society of the environmental resource or value affected, and precedent that would be set as a result of the proposed action that would commit the DNRC to future actions; and potential conflicts with local, state or federal laws. Therefore, an EA is the appropriate level of review and an EIS is not required.

- 2. Name, title, address and phone number of the person(s) responsible for preparing the EA:**

James P. Domino
Environmental Science Specialist
State Water Projects Bureau
Montana Department of Natural Resources and Conservation
1424 9th Avenue, P.O. Box 201601
Helena, MT 59620-1601
(406) 444-6622
e-mail jdomino@mt.gov

- 3. List of agencies consulted during preparation of the EA:**

Montana Department of Fish, Wildlife & Parks
Montana State Historic Preservation Office (SHPO)
Montana Natural Heritage Program – Natural Resources Information System (NRIS)
Montana Department of Environmental Quality
Montana Department of Natural Resources and Conservation, Dam Safety Program
U.S. Army Corps of Engineers

PART V. ENVIRONMENTAL REVIEW CHECKLIST

4. Evaluation of the impacts of the Proposed Action including secondary and cumulative impacts on the Physical and Human Environment.

A. PHYSICAL ENVIRONMENT

1. LAND RESOURCES Will the proposed action result in:	IMPACT *				Can Impact Be Mitigated *	Comment Index
	Unknown *	None	Minor *	Potentially Significant		
a. **Soil instability or changes in geologic substructure?		X				1a.
b. Disruption, displacement, erosion, compaction, moisture loss, or over-covering of soil, which would reduce productivity or fertility?			X			1b
c. **Destruction, covering or modification of any unique geologic or physical features?		X				1c.
d. Changes in siltation, deposition or erosion patterns that may modify the channel of a river or stream or the bed or shore of a lake?		X				1d.
e. Exposure of people or property to earthquakes, landslides, ground failure, or other natural hazard?		X				
f. Other:		X				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (attach additional pages of narrative if needed):

1a. The installation of drains and construction of a new outlet terminal structure would not affect geologic substructure or soil stability.

1b. Soil would be disturbed during construction of the terminal structure and drain installation, which will cause some erosion, compaction, moisture loss and loss of soil over-covering, but the area affected would be small (.5 acre or less) and the effects would be minor. All disturbed areas would be reclaimed and reseeded upon project completion.

1c. No unique geologic features would be destroyed, covered, or modified by the proposed action.

1d. No changes to deposition patterns will occur.

2. AIR Will the proposed action result in:	IMPACT *				Can Impact Be Mitigated *	Comment Index
	Unknown *	None	Minor *	Potentially Significant		
a. **Emission of air pollutants or deterioration of ambient air quality? (Also see 13 (c).)			X			2a.
b. Creation of objectionable odors?		X				
c. Alteration of air movement, moisture, or temperature patterns or any change in climate, either locally or regionally?		X				
d. Other:		X				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Air Resources (attach additional pages of narrative if needed):

2a. Minor and temporary dust and vehicle emissions will be created by heavy equipment during construction, but would end after completion of the project.

3. <u>WATER</u>	IMPACT *				Can Impact Be Mitigated*	Comment Index
	Unknown *	None	Minor *	Potentially Significant		
Will the proposed action result in:						
a. •Discharge into surface water or any alteration of surface water quality including but not limited to temperature, dissolved oxygen or turbidity?		X				1a
b. Changes in drainage patterns or the rate and amount of surface runoff?		X				
c. Alteration of the course or magnitude of floodwater or other flows?		X				
d. Changes in the amount of surface water in any water body or creation of a new water body?		X				
e. Exposure of people or property to water related hazards such as flooding?		X				
f. Changes in the quality of groundwater?		X				
g. Changes in the quantity of groundwater?		X				
h. Increase in risk of contamination of surface or groundwater?		X				
i. Effects on any existing water right or reservation?		X				
j. Effects on other water users as a result of any alteration in surface or groundwater quality?		X				
k. Effects on other users as a result of any alteration in surface or groundwater quantity?		X				
l. Other:		X				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Water Resources (attach additional pages of narrative if needed):

3a. It is not anticipated that the proposed action would cause any increase in turbidity in the vicinity of the N. Dam outlet during construction. Potential impacts are eliminated by having the outlet gate closed and the work area and canal dry for the duration of the project.

4. VEGETATION Will the proposed action result in?	IMPACT *				Can Impact Be Mitigated *	Comment Index
	Unknown *	None	Minor *	Potentially Significant		
a. Changes in the diversity, productivity or abundance of plant species (including trees, shrubs, grass, crops, and aquatic plants)?		X				
b. Alteration of a plant community?		X				
c. Adverse effects on any unique, rare, threatened, or endangered species?		X				4c.
d. Reduction in acreage or productivity of any agricultural land?		X				
e. Establishment or spread of noxious weeds?			X			4e.
f. Other:		X				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Vegetation (attach additional pages of narrative if needed):4a.

4c. A Montana Natural Heritage Program file search indicated that one vascular plant species, Downingia laeta (Great Basin Downingia), a state species of special concern, as being documented in an area approximately two miles from the project location. The only known documentation of this plant occurred in 1887. A site survey will be conducted prior to construction to determine if any Downingia laeta exists within the zone of disturbance. Appropriate protection measures would be implemented if any Downingia laeta is discovered.

No significant impacts are anticipated to Downingia laeta or any other plant species of special concern as a result of the preferred alternative.

4e. An increase in noxious weeds may occur due to soil disturbance and equipment operation. Effects are negligible in the long-term because of reclamation and weed control implementation.

** 5. FISH/WILDLIFE	IMPACT *				Can Impact Be Mitigated *	Comment Index
	Unknown *	None	Minor *	Potentially Significant		
Will the proposed action result in:						
a. Deterioration of critical fish or wildlife habitat?		X				
b. Changes in the diversity or abundance of game animals or bird species?		X				
c. Changes in the diversity or abundance of non-game species?		X				
d. Introduction of new species into an area?		X				
e. Creation of a barrier to the migration or movement of animals?		X				
f. Adverse effects on any unique, rare, threatened, or endangered species?		X				5f.
g. Increase in conditions that stress wildlife populations or limit abundance (including harassment, legal or illegal harvest or other human activity)?			X			5g.
h. Other:		X				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Fish and Wildlife (attach additional pages of narrative if needed):

5f & 5g. A Montana Natural Heritage Program file search indicated the area as occupied habitat for the Grizzly Bear and Long-billed Curlew. The Grizzly Bear is listed as threatened under the Endangered Species Act. The Long-billed Curlew is listed as a state species of special concern. Consultation with the DFWP indicated that no impacts would occur to the Curlew, which will have migrated out of the area by the start of the construction. The DFWP indicated a low likelihood for any significant impacts to Grizzly Bears due to the small scale and scope of the project. Local wildlife within the immediate vicinity of the project location (e.g. mule and whitetail deer, pronghorn antelope) would most likely avoid the immediate work site during construction. This impact would be minor, non-significant and end upon project completion. The DFWP also indicated that the Sun River Elk herd would be migrating during the construction, but given the location, small scale and scope of the project, that there was a low likelihood of any significant, adverse impacts.

No significant impacts are anticipated to any wildlife species, threatened or endangered wildlife species or wildlife species of special concern as a result of the proposed action.

B. HUMAN ENVIRONMENT

6. <u>NOISE/ELECTRICAL EFFECTS</u> Will the proposed action result in:	IMPACT *				Can Impact Be Mitigated *	Comment Index
	Unknown *	None	Minor •	Potentially Significant		
a. Increases in existing noise levels?			X			6a.
b. Exposure of people to serve or nuisance noise levels?		X				
c. Creation of electrostatic or electromagnetic effects that could be detrimental to human health or property?		X				
d. Interference with radio or television reception and operation?		X				
e. Other:		X				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Noise/Electrical Effects (attach additional pages of narrative if needed):

6a. There will be a temporary increase in noise level during construction. This would end after completion of the project. There are no residences adjacent to the site that would be disturbed by the construction.

7. <u>LAND USE</u> Will the proposed action result in:	IMPACT •				Can Impact Be Mitigated •	Comment Index
	Unknown •	None	Minor •	Potentially Significant		
a. Alteration of or interference with the productivity or profitability of the existing land use of an area?		X				7a
b. Conflict with a designated natural area or area of unusual scientific or educational importance?		X				
c. Conflict with any existing land use whose presence would constrain or potentially prohibit the proposed action?		X				
d. Adverse effects on or relocation of residences?		X				
e. Increase regulatory restrictions on private property?		X				
f. Other:		X				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Use (attach additional pages of narrative if needed):

7a. There will be no alteration or interference with the existing land use. This project is intended to enhance the agricultural use of the land irrigated by the Nilan Project by insuring that the North Dam continues to function in a safe and sustainable manner.

8. <u>RISK/HEALTH HAZARDS</u> Will the proposed action result in:	IMPACT *				Can Impact Be Mitigated *	Comment Index
	Unknown *	None	Minor *	Potentially Significant		
a. Risk of an explosion or release of hazardous substances (including, but not limited to oil, pesticides, chemicals, or radiation) in the event of an accident or other forms of disruption?		X				
b. Affect an existing emergency response or emergency evacuation plan, or create a need for a new plan?		X				
c. Creation of any human health hazard or potential hazard?		X				8c.
d. Other:		X				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Risk/Health Hazards (attach additional pages of narrative if needed):

8a. The proposed action will not create any foreseeable risks or health hazards.

8c. The installation of a new outlet terminal structure and drain system will serve to enhance public safety by addressing a potential threat to the structural integrity of the North Dam. This would become a more serious safety problem over time if the structure is not replaced.

9. COMMUNITY IMPACT Will the proposed action result in:	IMPACT *				Can Impact Be Mitigated *	Comment Index
	Unknown *	None	Minor *	Potentially Significant		
a. Alteration of the location, distribution, density, or growth rate of the human population of an area?		X				
b. Alteration of the social structure of a community?		X				
c. Alteration of the level or distribution of employment or community or personal income?		X				
d. Changes in industrial or commercial activity?		X				
e. Increased traffic hazards or effects on existing transportation facilities or patterns of movement of people and goods?		X				
f. Other:		X				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Community Impact (attach additional pages of narrative if needed):

10. <u>PUBLIC SERVICES/TAXES/UTILITIES</u>	IMPACT *				Can Impact Be Mitigated *	Comment Index
	Unknown *	None	Minor *	Potentially Significant		
Will the proposed action result in:						
a. Will the proposed action have an effect upon or result in a need for new or altered governmental services in any of the following areas: fire or police protection, schools, parks/recreational facilities, roads or other public maintenance, water supply, sewer or septic systems, solid waste disposal, health, or other governmental services? If any, specify:		X				10a.
b. Will the proposed action have an effect upon the local or state tax base and revenues?		X				
c. Will the proposed action result in a need for new facilities or substantial alterations of any of the following utilities: electric power, natural gas, other fuel supply or distribution systems, or communications?		X				
d. Will the proposed action result in increased use of any energy source?		X				
e. Define projected revenue sources						10e.
f. Define projected maintenance costs						10f.
g. Other:		X				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Public Services/Taxes/Utilities (attach additional pages of narrative if needed):

10a. The proposed action would not have an effect upon or result in a need for new or altered governmental services.

10e. The cost of the project is estimated at \$113,608. Money for this project would come from the DNRC State Water Projects Bureau Hydropower Account.

10f. All routine maintenance and operating costs associated with the Nilan Project are the responsibility of the Nilan Water Users Association. No increase in maintenance and operation costs to the Water Users are anticipated with the proposed action.

•• 11. <u>AESTHETICS/RECREATION</u> Will the proposed action result in:	IMPACT •				Can Impact Be Mitigated •	Comment Index
	Unknown •	None	Minor •	Potentially Significant		
a. Alteration of any scenic vista or creation of an aesthetically offensive site or effect that is open to public view?			X			11a
b. Alteration of the aesthetic character of a community or neighborhood?		X				
c. Alteration of the quality or quantity of recreational/tourism opportunities and settings?			X			11c.
d. Will any designated or proposed wild or scenic rivers, trails or wilderness areas be impacted?		X				
e. Other:		X				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Aesthetics/Recreation (attach additional pages of narrative if needed):

11 a & c. Construction will temporarily affect the aesthetics of the area in the short-term. Some anglers and picnickers or campers may be impacted. Hunting is also a popular recreational activity in the area, primarily for upland game birds, big game, and waterfowl. Given the small scale and scope of the project, it is anticipated that hunting opportunities will not be significantly or adversely impacted, and that potential impacts resulting from the construction would be minor and end upon completion of the project. The quality of the recreational opportunities and setting may be temporarily impacted during construction. The effects will be short-term, non-significant and end with the completion of the project. All disturbed areas will be reclaimed and reseeded upon project completion.

12. <u>CULTURAL/HISTORICAL RESOURCES</u> Will the proposed action result in:	IMPACT *				Can Impact Be Mitigated *	Comment Index
	Unknown *	None	Minor *	Potentially Significant		
a. **Destruction or alteration of any site, structure or object of prehistoric historic, or paleontological importance?		X				12a.
b. Physical change that would affect unique cultural values?		X				12b
c. Effects on existing religious or sacred uses of a site or area?		X				12c.
d. Will the project affect historic or cultural resources?		X				12d
e. Other:		X				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Cultural/Historical Resources (attach additional pages of narrative if needed):

12a-d The proposed project will not result in the destruction, disturbance, or alteration of any known site structure, or object of prehistoric, cultural, religious, sacred, historic, or paleontological importance.

C. SIGNIFICANCE CRITERIA

13. SUMMARY EVALUATION OF SIGNIFICANCE Will the proposed action, considered as a whole:	IMPACT *				Can Impact Be Mitigated *	Comment Index
	Unknown *	None	Minor *	Potentially Significant		
a. Have impacts that are individually limited, but cumulatively considerable? (A project or program may result in impacts on two or more separate resources that create a significant effect when considered together or in total.)		X				13a
b. Involve potential risks or adverse effects, which are uncertain but extremely hazardous if they were to occur?		X				
c. Potentially conflict with the substantive requirements of any local, state, or federal law, regulation, standard or formal plan?		X				
d. Establish a precedent or likelihood that future actions with significant environmental impacts will be proposed?		X				
e. Generate substantial debate or controversy about the nature of the impacts that would be created?		X				
f. Is the project expected to have organized opposition or generate substantial public controversy?		X				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Significance Criteria (attach additional pages of narrative if needed):

13a. This EA found no significant impacts to the human or physical environment from the proposed action.

PART VI. NARRATIVE EVALUATION AND COMMENT

This EA did not reveal any significant negative impacts to the physical and human environment stemming from the proposed action. No threatened or endangered species would be affected, and no unique or sensitive physical, cultural or historic features would be disturbed. The impacts associated with the actual construction will be short-term and end with the completion of the project. Impacts associated with potential weed proliferation and the quality of the recreational experience will be mitigated by enhanced weed control efforts and the reclamation and reseeding of the work site. The long-term public benefits, including enhanced public safety and the protection of property downstream from a high hazard dam, outweigh any short-term, temporary negative impacts.

The proposed project would considerably enhance public safety by addressing a potentially serious problem with a critical component of the dam without causing significant, adverse affects to the environment.

Appendix A

Outlet Terminal Structure and Drain Design and Site Plan

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